

A NEW SPECIES OF AEDES OF THE FINLAYA GROUP FROM ANGAUR ISLAND

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Among other species of mosquitoes collected on Angaur Island in December 1944 by Pfc. William B. Lewellen of the Entomology Section, 18th Medical General Laboratory, was a species found breeding only in water held in axils of leaves of the pandanus tree. Several specimens of the larvae were reared to adults. One female was captured on the inside surface of a hospital ward tent, apparently having obtained a blood meal. They were found to be an undescribed *Aedes* species of the Finlaya group, which the authors have named *Aedes* (Finlaya) *lewelleni* after the original collector.

Aedes (Finlaya) *lewelleni*, new species

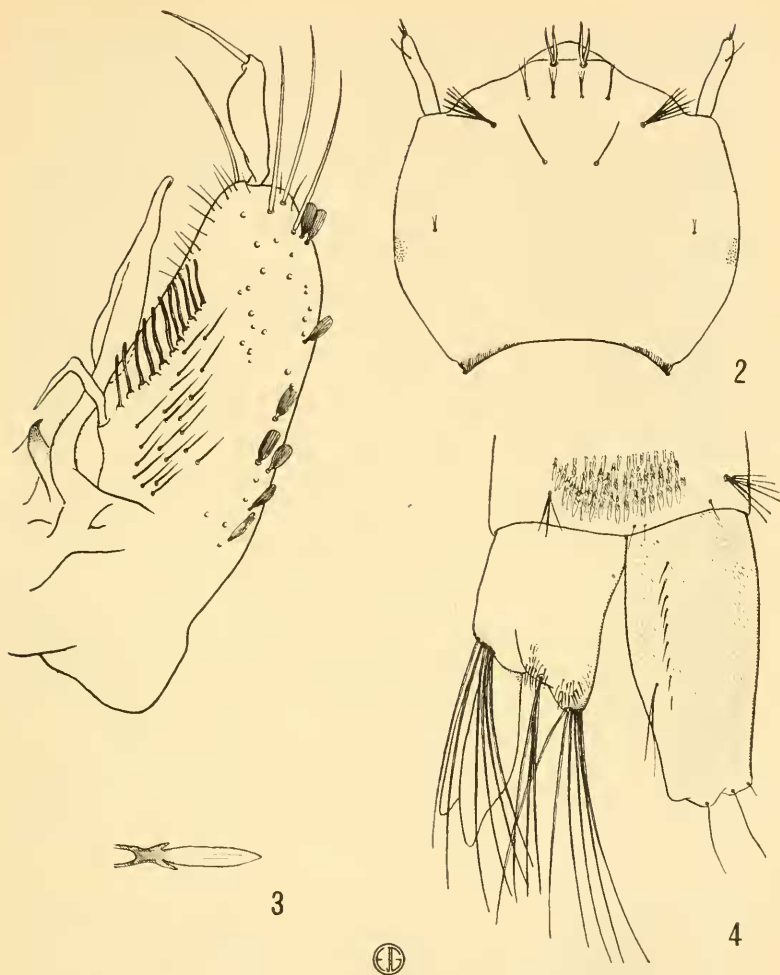
Male.—Length 3.4 mm., wing 2.4-2.6 mm. Median area of vertex with several broad, appressed, whitish scales, mixed with some narrow, curved, whitish and upright, dark scales; sides of vertex with broad, appressed, whitish scales and a spot of dark ones; a patch of white, appressed, broad scales low on cheeks which extends to the eye margin. Torus light with a patch of small, broad, whitish scales on the inner side. Proboscis long, black, and slender, with a yellowish ring in the center approximately one-fourth as long as the proboscis; white scaled at the tip; ventrally the white scales extend basally for an approximate distance of one-fifth the length of the proboscis; scales are more yellowish dorsally. Palpus slightly longer than the proboscis, black with white rings. Mesonotum with bicolorous scaling more or less in a definite pattern of chocolate brown and golden, narrow curved scales, the golden scales in definite patches; shoulder spots of golden scales present, also a few whitish scales are found around the antescutellar space. Pronotum with broad, appressed whitish scales; posterior pronotal scales are not as white as those on the anterior lobe. Scutellum with whitish, broad, appressed scales and a few narrow, curved, paler ones. Pleuron with 3 or 4 post-spiracular bristles and no lower mesepimeral bristles; light brown with many white, broad scales in an irregular band and a small patch of white scales beneath it. Wings elaborately spotted with yellow, white, and black, broad scales; 4 irregular pale spots and 4 larger irregular dark spots along the costa; vein 3 with a white spot in the center and a smaller light spot at the base; vein 6 with a few white scales apically, preceded by a long, black spot of scales; basally all scales are light; pale fringe spots present opposite tips of all longitudinal veins. Halter whitish except at the knob, which is light yellow, and with a few white scales. Legs.—Coxae light brown with some pale and dark scales; femora mainly black scaled with several yellowish to whitish bands, apical, ven-

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tral tufts of long, outstanding scales present; tibiae with apically whitish bands, plus 4 or 5 other whitish bands; first tarsal segment of all legs with apical and basal light bands and a narrow light band in the center; second and third tarsal segment of hind tarsi and the second segment of the mid-tarsi basally all dark, apically with a light band approximately one-third the length of the segment; second tarsal segment of the foreleg has from a few white scales to a distinct band apically; third tarsal segment of the fore and mid-legs is all black scaled; fourth tarsal segment of all legs all dark scaled; fifth tarsal segment of all legs whitish scaled. Abdomen mostly dark dorsally, with two distinct spots of yellowish white scales on tergites II to V, also with some whitish scales basally; tergites VI and VII largely yellowish with a few white scales; white lateral apical spots present on tergites IV, V and VI, plainest on VI; sternites with apical black bands on V, VI, and II, also tufts of long, outstanding black scales; Genitalia (Figure 1).—Basistyle about three times as long as wide, with a large specialized seta at the base and a row of stout setae running from this specialized seta apically for about three-fourths the distance of the basistyle. Dististyle slender, slightly inflated medially, less than half as long as the basistyle; apical spine more than one-half as long as dististyle. Claspette long, slender, spear shaped with a sharp point when viewed laterally. Lobes of ninth tergite with a single bristle; mesosome simple.

Female.—Differs from male chiefly as follows: Palpus about one-fifth as long as the proboscis, slightly swollen apically, all black scaled except at the extreme apex, where there are a few broad white and yellowish scales. Abdomen mostly dark above; tergites II to V usually with two yellowish median spots.

Larva (Figures 2, 3, and 4).—Length 5 mm. Head slightly broader than long; antennae not slender, apical half tapering very slightly, its length less than one-third width of head; no spicules present; hair tuft single, placed about apical third; clypeal spines moderately stout, two branched, yellow, curved downward and slightly inward; anteaantennal hair (A) with 3 to 6 branches; lower head hair (B) single or double, about as long as the antenna, placed about on a horizontal line with hair (d); upper head hair (C) single, placed almost directly behind hair (B) but slightly basal of hair (A); postclypeal hair (d) double or triple; sutural hair (e) double. Thorax.—Prothoracic hairs plumose; upper one single and stout, lower many branched; mesothoracic upper hair stout, single, lower many branched, both plumose; metathoracic hairs both several branched and plumose. Several stellate hairs on both the thorax and abdomen. Abdomen.—First segment with 5 pairs of stellate hairs; upper lateral hair tuft multiple and plumose; lower single and plumose. Comb scales on eighth segment consist of several rows in a large triangular patch; individual scales with a narrow base; at about the basal third there is a tooth projecting on each side and from the center extends a blade shaped structure approximately twice as long as the basal part. Siphonal index 2; 7 to 9 pecten teeth, not fringed and



Aedes lewelleni, n. sp. 1. Male genitalia, ventral; 2. Head of larva; 3. Enlarged view of comb scale; 4. Anal segment of larva. (Drawn by Eugene J. Gerbergh, 1st Lieutenant, Sanitary Corps, A.U.S.)

with no lateral spines, hair tuft double and plumose, placed approximately in the center of air tube; whole of air tube finely spiculed; ventral and latero-dorsal valves bear a long single hair approximately as long as siphon. Dorsal saddle of anal segment small, finely spiculed, indistinctly defined, but with long, fringed spines (not so long as the saddle is wide) on the outer dorsal margins; lateral hair tuft triple

and plumose. Ventral hair group consists of several hairs grouped so as to form the ventral brush, each furcated some distance from the base, not plumose; dorsal hair group consists of two long single hairs and two multiple tufts, the multiple tufts furcated some distance from the base, not plumose; gills four, approximately as long as the air tube.

Holotype.—Male, reared from larva. Collected at Angaur Island, Palau Group, Western Carolines, 14 December 1944, by W. B. Lewellen. Deposited in the U. S. National Museum, Washington, D. C.

Allotype.—Female, reared and collected as above. Deposited in the U. S. National Museum, Washington, D. C.

Paratypes.—1 male collected as above; 1 male reared from larva, 1 female reared from larva, 21 December 1944 (C. H. Waite and W. B. Lewellen); 15 males and 5 females reared from larvae, 11 February to 18 February 1945 (F. Gabriel, J. L. Sills, and R. W. Baker). 1 male deposited with C. H. Waite; 1 male and 1 female deposited with J. E. Webb; 2 males and 1 female deposited with G. S. Starkey; 2 males and 2 females deposited with 18th Medical General Laboratory; 6 males deposited in U. S. Army Medical Museum; 5 males and 2 females deposited in U. S. National Museum.

Type larvae.—17 collected by W. B. Lewellen on Angaur Island, Palau Group, Western Carolines, 13 December to 19 December 1944, from leaf axils of pandanus trees. 2 deposited in U. S. National Museum, Washington, D. C.; 12 deposited with G. S. Starkey; 1 deposited with E. J. Gerbergh; 2 deposited with Hawaiian Sugar Planters' Association, Honolulu, T. H.

Type locality.—Angaur Island, Palau Group, Western Carolines. The larvae were found exclusively in pandanus trees.

HYDROPSYCHE ANTILLES, AN UNUSUAL NEW SPECIES FROM SANTO DOMINGO (Trichoptera, Hydropsyichidae)

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The following species is the second of the caddis fly genus *Hydropsyche* to be recorded from Santo Domingo. In 1941 Banks described *Hydropsyche domingensis* from this region, which until the present has been the only one known from the island.

The species described below is one of the most unusual in structure yet encountered in the genus. It differs from all of the North American forms in the biramous sclerotized proc-